Introducing Ramionics (Ramin Theory & Ramion Based Physics) To Resolve the Fine-Structure and other Constant, Dark Matter , Anti matter Asymmetry, Quantumised Gravity Problems By Ramin Khosravi (KSA)

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Introduction and energy equation

Ramin's Ramion theory explains how this universe is made from **only and only exactly one basic particle** (at FCC lattice) named Ramion (Rotational **A**nti-matter and **M**atter **I**on): an absolute energy $\boldsymbol{E_r}$ in form of **three-dimensional sphere** with real, measurable or calculatable parameters like energy $\boldsymbol{E_r}$, pressure **P** ,energy density $\boldsymbol{\rho_r} = \frac{E_r}{V}$,volume **V=** $\frac{4\pi}{3}\boldsymbol{r^3}$ **,** radius **r** ,angular speed **ω**, rotational speed on its surface(**v=r. ω =c=light speed**) , torque **T**, Moment inertia **I**, mass equivalent to its energy $\boldsymbol{m}=\frac{E_r}{c^2}$ and even spin and electrical charge $\boldsymbol{\pm q_r}$ and Coulomb constant $\boldsymbol{k_r}$ and two poles: north and south! In ramionics we need no extra dimension in space or time and no imaginal or modelled parameters or Force Carrier particles.

Ramions **generate, contains, transport, define, formulate, and Explain** any fundamental thing in physics:

space, time, compatible relativity + quantum,

matter, antimatter and their asymmetry,

gravity and so called dark matter, Time dilation,

energy, so called dark energy, space energy causing space expansion,

all elementary forces: gravity (+strong nuclear force), electromagnetic (+weak nuclear force),

elementary particles structure geometry,

physics constants like fine structure constant or elementary particles mass or electrical charges,

entanglement, warm hole, black hole, multiverse.

Energy:

Ramions have exactly equal linear and rotational parts of energy named $E_{Lr} + E_{Rr}$

Linear Energy → pressure → relativity → gravity & strong Nuclear force

rotational Energy→Torque→Electricity→Electromagnetic&weak nuclear force

Basic equation of Ramionics (including 26 equations)

(1) $E_r = \{m\,c^2 = (E_{Lr} + E_{Rr}) = 2(E_{Lr} = E_{Rr})\} = 2\left\{E_{Lr} = \frac{1}{2}m\,c^2 = PV = \frac{F_{Lr}}{4\pi\,r^2}\frac{4\pi\,r^3}{3} = \frac{1}{3}rF_{Lr}\right\} = 2\left\{E_{Rr} = \frac{1}{2}m\,c^2 = \frac{1}{2}(mr^2)\left(\frac{c^2}{r^2}\right) = \frac{1}{2}I\,\omega^2 = \frac{1}{2}r \times \left(\frac{mc^2}{r}\right) = \frac{1}{2}r \times F_{Rr} = \frac{1}{2}T = (2)E_{PE}\right\} = \left\{\hbar\,\omega_m = \hbar\frac{c}{r_m} = 2 \times (2)E_{PE} = 2 \times (2)\left(\frac{k_r\,q_r{}^2}{2\,r_m}\right)\right\} = \left\{\rho_r \mathrm{V} = (\frac{\rho_s}{\varphi})(\frac{4\pi\,r^3}{3}) = (\frac{c^4}{8\pi G\,R_D^2})(\frac{1}{\varphi})(\frac{4\pi\,r^3}{3})\right\} = \left\{E_{\text{neutrino}}\ \frac{3}{10n^3+15n^2+11n3+3} = E_{\text{Baryon}}\ \frac{1}{\frac{1}{10}(12\pi)^2\,2^g}\right\}$

Ramion has no neutrino problem to have speed of light because it's in energy mode (not matter) and also ramion generate space and time for observers and local users itself.

Ramion energy is noted as E_r in compare of other objects like baryons but Maybe it's noted as E_s in compare of another Ramion at far steady state space (without any mass or time dilation in neighbourhood)

In pressure-gravity part of basic equation we see

(2) $\boldsymbol{\rho_r = 2P \quad and \quad E = 2PV}$

also in thermodynamics we have $\boldsymbol{E = \frac{f_r}{2}PV}$ **that means** $\boldsymbol{f_r = 4}$ when $\boldsymbol{f_r}$ is degree of freedom dimensions . we also can calculate it: 3 dimensions for location and 3 dimensions for ω, reduction of 2 dimensions for the equipotential surfaces results in 4.

In rotational-electrical part of basic equation highlighted (2) multipliers (with parenthesis) represent (2) semi-spheres of ramion with electrical Potential energy of E_{PE} . We know that similar electrical

charges repel each other so collecting them on any surface needs energy (Like any capacitor) that can be calculated by two simple integrals:

(3) $E_{\Delta Q} = \int_{\infty}^{R} -\mathrm{F}\, dr = \int_{\infty}^{R} \frac{-k\, Q\, \Delta q}{r^2} dr = \frac{k\, Q\, \Delta q}{R}$ Negative sign for save Energy

(4) $E_{PE} = \int_{0}^{Q} \frac{k\, q\, dq}{r} = \frac{k\, Q^2}{2r}$ for any sphere or semi sphere with Q charge

North and south Semi sphere of ramions have reversed torque and consequently reversed electrical charges. In energy calculation they are appeared as $(\pm q_r)^2$so adds together as positive. In torque or electrical charge they are $\pm q_r$ *and* compensate each other.

If we consider total electrical charge of ramion, it's 0 then we have to calculate equivalent energy as Torque instead of electrical charge.

Basic equation shows electrical charge is only a mechanical concept (Area × Torque**)** and we know the magnetic field and Electromagnetic wave are generated by rotating or changes in Electrical field in their turn as Maxwell's laws explain.

In Quantum part of basic equation *we see*

(5) $\hbar\, \omega_m = \hbar\, \frac{c}{r_m}$

so we can calculate plank constant and fine structure constant easily! For Ramions (as **EnergyPackets when carry Electrical Field or Electromagnetic waves**) or any **EnergyLike** matter particles (means any particles with equal rotational and pressuring Energy), We can define and calculate plank constant by $\boldsymbol{E = \hbar\, \omega_m}$

It's important that Angular speed ω_m and radius r_m are in **matter state** (and not exactly equal to ω and r that belong to **Pure energy state** of Ramion).

We can simplify basic equation easily:

(6) $E_r = \hbar\, \omega_m = I\, \omega^2 = 2\, \frac{k_r\, {q_r}^2}{r_m} = T$

(7) $I = k_I\, m\, {r_m}^2$

$k_I examples: \frac{2}{5}\ for\ sphere, 1\ for\ loop, 2\ for\ Ramion$

(8) $r_m\, E = \sqrt{\frac{2}{k_I}}\ c\, \hbar = k_r\, {q_r}^2 = \frac{r}{2}\, T$

(9) $\hbar\, \omega_m = 2 \times (2) \left(\frac{k_r\, {q_r}^2}{2\, r_m}\right)$, $c = \omega_m\, r_m$,

α_r : Fine structure constant for ramions

(10) $\frac{1}{\alpha_r} = \frac{\hbar\ c}{2 k_r\, {q_r}^2} = \sqrt{\frac{k_I}{2}}$ $; k_I = 2\ for\ ramions$

Using 36390 as number of ramions in any baryon,we will show:

(11) $\frac{1}{\alpha} = 64\pi \left(\frac{10\sqrt{2}}{8\,\pi}\right)^{\frac{2}{3}} \left(1 - \frac{1}{36390}\right)$=137.03 for baryons

Also using 12 and 36390 in FCC lattice-texture-framework we can calculate mass and electrical charge of elementary particles (passing as-yet unexplored frontiers of human knowledge)

In cosmological part of basic equation we see:

(12) $\rho_r = \frac{\rho_s}{\varphi}\ or\ \rho_s = \varphi \rho_r$

means energy density of space (so called dark energy) is ramions energy in their volume by factor of $\varphi = \frac{\pi}{3\sqrt{2}} = 74\%$ that is the occupancy of ramions in their FCC lattice. We will show:

(13) $C^4 = 8\pi G \rho_s\, R_D^2$ *where G is gravity constant*

This equation relates Dark matter, Dark energy, Ramion Energy

And reality of Dark matter (forgotten gravity)

(14) $$g=\frac{GM}{R}\left(\frac{1}{R}+\frac{1}{R_D}\right)e^{-\frac{R}{R_D}}$$

Geometry of Space Structure in Ramin Theory

Because the ramions repel one another in all directions, they ultimately reach a state of maximal compression. But in large scale they cause space and time to expand (dark energy's role).

So $P = \frac{\rho_r}{2}$ is the maximum capability of pressure, of cource there is many fluctuations (and also a little indentation for electromagnetic carrying) but high pressure in long time or hard collisions can cause the ramions to be collapsed and distributed to space (converting energy to mass)

Although usually both models (the FCC and HPC hexagonal) can be considered for ramion geometry, the FCC model, yields a softer space.

In the FCC model, each ramion has twelve nearest neighbours in the next layer, all tangent to it means layer 1 is very strong.

Table 1. Crystal Lattices — (FCC, BCC, HCP, Diamond)

Structure	Atoms/Cell	CN	Packing (APF)	Slip / Planes	Elements	Alloys & Applications	Mechanical Behavior
FCC (Face-Centered Cubic)	4	12	0.74 (74%) ; Vf = 0.74	12 slip systems on {111}<110> (close-packed) — easy slip	Al, Cu, Ni, Ag, Au, Pt, Pb, Ir, Pd	Austenitic stainless (γ-Fe), Ni superalloys (Inconel), Al-alloys (2xxx/6xxx/7xxx), Cu-alloys	Very ductile & tough; low DBTT; excellent formability
BCC (Body-Centered Cubic)	2	8	0.68 (68%) ; Vf = 0.68	{110}, {112}, {123}<111>; no close-packed planes → higher Peierls stress	α-Fe, Cr, W, Mo, V, Nb, Ta	Ferritic/martensitic steels, low-alloy steels; high-T strength (W, Mo)	Strong, less ductile; DBTT present; often harder/brittle at low T
HCP (Hexagonal Close-Packed)	6	12	0.74 (74%) ; Vf = 0.74	Basal {0001}<11-20> + prismatic/pyramidal; anisotropic; limited slip at RT	Mg, Ti(α), Zn, Zr, Co, Cd	Ti-6Al-4V (α+β), Mg-alloys (AZ31, ZK60), Zr-alloys (nuclear cladding)	Good specific strength; lower ductility at RT; texture-dependent
Diamond Cubic (Covalent)	8	4	≈0.34 (≈34%) ; Vf ≈ 0.34	Strong tetrahedral covalent bonds; cleavage on {111}	C (diamond), Si, Ge (SiC related polytypes)	Semiconductors (Si, Ge); diamond cutting/abrasives; heat spreaders	Extremely hard, brittle; Si/Ge are semiconductors

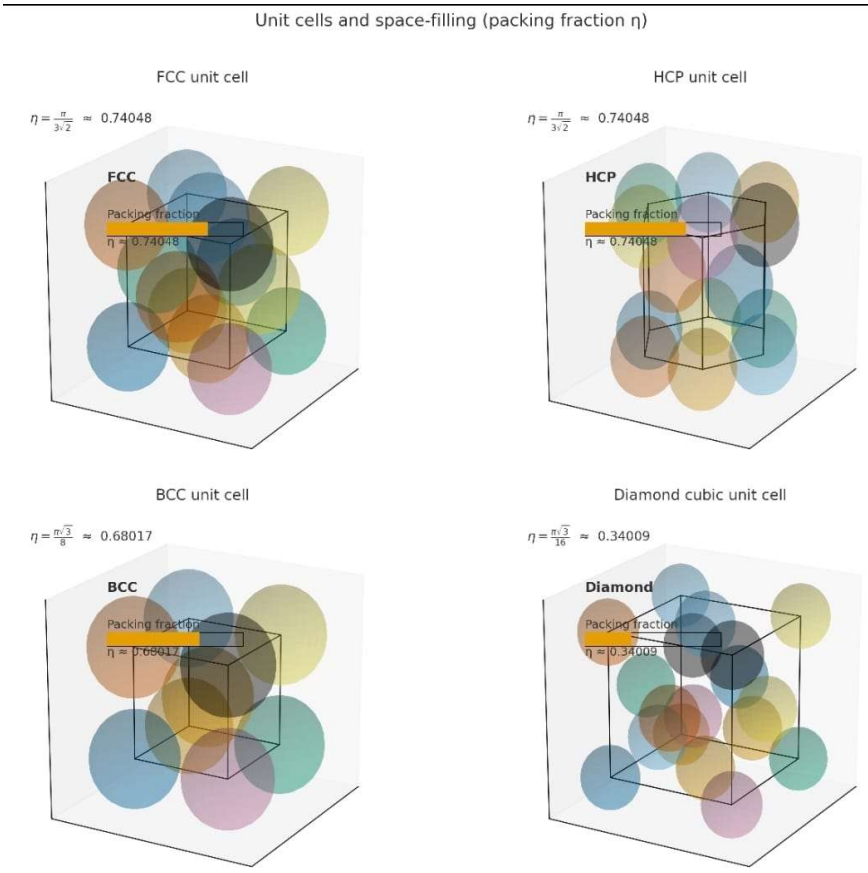


Figure 1

Geometry shows number of ramions in layer n as follows:

(15) $\mathbf{L(n)=10}n^2 + \mathbf{2}$

for example L(1)=12, L(2)=42 but **L(0)=1 centre**

IL(t)=Rounded up of Inverse Function of L

The cumulative number up to and including layer N is:

(16) $\mathrm{T(n)} = (1\ for\ centre) + \sum_{k=1}^{n}(10k^2 + 2)$

(17) $\mathrm{T(n)} = (1\ for\ centre) + \frac{10n^3+15n^2+11n}{3}$

IT(t)=Rounded up of Inverse Function of T

(18) $\varphi = \frac{\pi}{3\sqrt{2}} = 0.74048048969$ volume occupancy

Ramion theory introduces two new geometry constant: φ′ and β:

For layers sufficiently distant from the assumed centre, we have:

(19) $\varphi \frac{4\pi}{3} R^3 = N(n) \frac{4}{3} \pi r^3$

(20) $R = \varphi' \; n(2r) \qquad \varphi' : diameter\ factor$

(21) $\varphi \frac{4\pi}{3} \left(\varphi' \; n(2r)\right)^3 = (10n^2) \frac{4}{3} \pi r^3$

(22) $\varphi' = \sqrt[3]{\frac{10}{24\varphi}} = \sqrt[3]{\frac{10\sqrt{2}}{8\pi}} = 0.8255785095$

Whether we consider ramions covered area as circle $\boldsymbol{\pi r^2}$ of their cross section area to layer sphere **or** as a hemisphere surface $\frac{\mathbf{4\pi r^2}}{\mathbf{2}}$ but with applying the cosine factor of vector multiplication,

the ratio of the ramions covered area to the layer area is **β**

(23) $(10n^2 + 2)\pi r^2 = \beta \; 4\pi R^2 = \beta \; (4\pi) \; (\varphi' \; n \; 2R)^2$

(24) $\rightarrow \beta = \frac{10}{16\varphi'^2} = \frac{10}{16 \left(\frac{10\sqrt{2}}{8\pi}\right)^{\frac{2}{3}}} = 0.91698716849$

We will see this parameters in fine structure constant that approves the geometry of energy distribution in the space means ramion lattice texture.

(25) $\rho_S = \varphi\rho_r = 0.74\,\rho_r \qquad \rho_r = \frac{\rho_S}{\varphi}$

ρ_r: Ramion volume energy density

ρ_s: Space Energy density

Not only matters are not created by stopping or concentration of energy but also Matters (for particles or even huge black holes) are collapsing some ramions and distributing their energy into other ramions in the space, more closer more share of energy. After that a black hole remains with radius of r1=R_H and velocity of v1. This hole equation is same in elementary particles in an atom or huge black holes in the space. 12 expanded ramions with r1 radius surround that hole. so not only light, but also mass is a wave in space. There is no particle-wave paradox except what our observation (by eye or device) and technology prefers or lets us.

When Ramions get extra energy they can't save it by increasing their pressure or velocity (light speed C) is on maximum value for this universe and there is no space to increase volume. They can tolerate a little extra pressure but only as fluctuation or short time in their dynamics and not in steady state, else they collapse consequently. Only remained way is expanding space itself. But time (for observer on ramions surface) also must be expanded (dialled) with same factor (to save c and energy values)also Space expansion factor must exactly Balance Force on any Ramion and also on its layer simultaneously:

(26) $F_{(R)}=F_s \rightarrow r_{(R)}{}^2 P'_{(R)} = r_s{}^2 P_r \rightarrow r_{(R)}{}^2 \rho'_{(R)} = r_s{}^2 \rho_r$

F_s, r_s, t_s:

bond force and radius (or $2\pi r$) and period time absolute values means for ramion *at far steady state space*

F, r, t: relative values sensed & observed at any ramions surface

$P'_{(R)}$ *and* $\rho'_{(R)}$: relative (not absolute) energy density and pressure as the observer on surface of ramion senses. They are less than P_r and ρ_r so simulate a vacuum and gravity to the hole interpreted as matter.

(27) $\rho'_{(R)} = \rho_s\,(1 - f_{(R)})$

(28) $P'_{(R)} = P_s\,(1 - f_{(R)})$

Function $f_{(R)}$ is defined to simplify solving equations.

(29) $t_{(R)} = t_s/\sqrt{1 - f_{(R)}} = t_s\sqrt{\frac{\rho_s}{\rho'_s}}$

(30) $r_{(R)} = r_s/\sqrt{1 - f_{(R)}} = r_s\sqrt{\frac{\rho_s}{\rho'_s}}$

Force on m2 is calculated by integralling $p' \times dS$ on its surface:

(31) $F = \int P' \times dS \rightarrow\rightarrow F = (V_{m2} = \frac{m_2\,C^2}{\rho_s})\,(\frac{-\partial\,P}{\partial\,R})$

g: gravity acceleration toward centre means –F/m_2

(32) $F = \frac{m_2\,C^2}{\rho_s}\,(\frac{-dP}{dR}) \rightarrow \boldsymbol{g = \frac{-F}{m_2} = \frac{c^2}{2}\left(\frac{-df}{dR}\right)}$

energy balance equation:

(33) $m_1C^2 = E_{m1} = \int_0^\infty(\rho_s - \rho\,)\;4\pi R^2\,dR$

(34) $m_1C^2 = 4\pi\rho_s\int_0^\infty f\,R^2\,dR$

So we have 3 criteria's:

a) $f(R) Function$ Must be monotonically decreasing functions, tend to zero when r→∞ and also must limited between 0 to 1

b) $\left(\frac{-df}{dR}\right)\ functions$ Must be monotonically decreasing functions, tend to zero as r→∞,

$c)$ $integral$ $(\int_0^\infty f\ R^2\,dR)$ Must be finite and positive, so that energy can be balanced.

The general solution:

(35) $f = (\frac{B}{R})^k \exp(-(\frac{R}{A})^P)$

factor $(\frac{B}{R})^k$ is needed to decrease function in close R when exponential factor $\exp(-(\frac{R}{A})^P)$ is almost 1, exponential factor is needed to limit the calculated energy, forgetting this part leaded to dark matter idea.

In very close or accurate calculation we have to compute discrete equations of FCC lattice, all needed equations or supported in ramionics, but in most application continues analyses is enough:

Solution A: Integer k and p

(36) $f = \sum f_{kp} = \sum (\frac{B}{R})^k \exp(-(\frac{R}{A})^P)$

(37) Gravitational Acceleration:

$$g = \sum g_{kp} = \sum \frac{C^2}{2} \left(\frac{-df_{kp}}{d_R}\right) = \frac{C^2}{2} \sum (\frac{B}{R})^k \frac{1}{R} \left\{ k + p (\frac{R}{A})^p \right\} \exp\left(-(\frac{R}{A})^P\right)$$

(38) Energy Balance: $E = \sum E_{kp} = \sum 4\pi\rho_s B^k A^{3-k} z_k(p)$

(39) $z_k(p) = \left(\frac{1}{\mathrm{p}}\right) \Gamma\left(\frac{3-\mathrm{k}}{\mathrm{p}}\right)$ when $\Gamma(n) = (n-1)!$ Gamma function

necessary conditions means

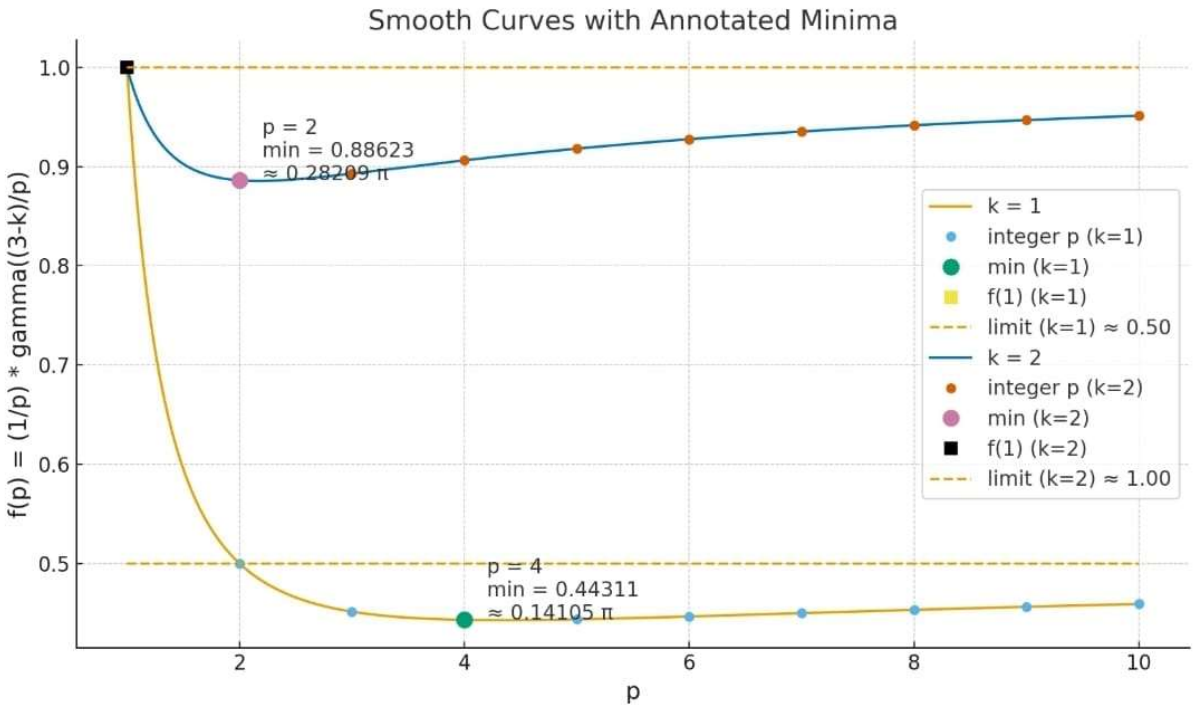
(40) $0 < p \leq k < 3$

Therefore: we have 3 terms in answer

K=1, t=1 Long Range Gravity: consist of bright Gravity (proportional to 1/R2 as great Newton and great Einstein said) and Dark Gravity at far range (so called dark matter that Ramion Theory explains and models it simply without any dark matter particle)

K=2, t=1 Middle Range Gravity (between short and long) maybe help to fit curves because sum of them must be limited between 0 to 1

K=2, t=2 short Range Gravity means Strong nuclear force



(41) $$\rho'_s = \rho_s \left(1 - \frac{R_F}{R} e^{-\frac{R}{R_D}} - \left(\frac{B_1}{R}\right)^2 e^{-\frac{R}{A_1}} - \left(\frac{B_2}{R}\right)^2 e^{-\left(\frac{R}{A_2}\right)^2} \right)$$

(42) $$g = \frac{C^2}{2R} \left\{ \begin{array}{c} \frac{R_F}{R} \left(1 + 1\left(\frac{R}{R_D}\right)^1\right) e^{-\frac{R}{R_D}} \\ + \left(\frac{B_1}{R}\right)^2 \left(2 + 1\left(\frac{R}{A_1}\right)^1\right) e^{-\frac{R}{A_1}} \\ + \left(\frac{B_2}{R}\right)^2 \left(2 + 2\left(\frac{R}{A_2}\right)^2\right) e^{-\left(\frac{R}{A_2}\right)^2} \end{array} \right\}$$

In energy balancing we can ignore energy of k=2 parts:

(43) $$R_F = \frac{2G\,M}{RC^2} \quad \text{and} \quad g = \frac{GM}{R}\left(\frac{1}{R} + \frac{1}{R_D}\right) e^{-\frac{R}{R_D}}$$

(44) $$E = 4\pi\rho_s \left\{ \begin{array}{c} R_F^1\, R_D^2 \int_0^\infty x\, e^{-(x)^1}\, dx \\ + B_1{}^2\, A_1{}^1 \int_0^\infty x^2\, e^{-(x)^1} dx \\ + B_2{}^2\, A_2{}^1 \int_0^\infty x^2\, e^{-(x)^2} dx \end{array} \right\}$$

(45) $$E = 4\pi\rho_s\, R_F^1\, R_D^2 \;\rightarrow\; E = 4\pi\rho_s \left(R_F = \frac{2G\,M}{RC^2}\right) R_D^2$$

(46) $\rightarrow C^4 = 8\pi G \rho_s \, R_D^2$ relating light speed c , G constant, space energy density ρ_s and radius of dark gravity observation R_D

About $\boldsymbol{\rho_s}$

(47) If this estimation is correct $\rho_s = \ 5.4 + \ 10^{-10} \ {}^{J}/_{m^3}$

Then:

(48) $R_D = 9.46 \ x \ 10^{25} m = \ 10^{10} \ LY$

If R_D is taken to be 10^6 times smaller (i.e. 10,000 light-year), then we must multiply ρ_s by 10^{12}; hence:

(49) $\rho_s = 540 \ {}^{J}/_{m^3}$

However, excessively large estimation of this energy density are incorrect.

Solution B: floating k and p

K and p are changed from 2 to 1 as R goes from R1 to ∞

(50) k=p=$(1+\frac{R_1}{R})$

R_H $radius\ of\ central\ hole$ (where k=p=3)

R_1=2R_H radius of fist FCC layer around the R_H (where k=p=2)

R→∞ whre (k=p=1)

(51) $$\rho'_s = \ \rho_s(1-f) = \rho_s \left(1 - \ \left(\frac{R_F}{R}\right)^{(1+\frac{R_1}{R})} e^{-\ (\frac{R}{R_D})^{(1+\frac{R_1}{R})}} \right)$$

For long range R>>R_1 we see Bright and Dark gravity:

(52) $$\rho'_s = \rho_s(1 - \ \frac{R_F}{R} e^{-\frac{R}{R_D}} \ )$$

(53) $g = \frac{G\,M}{R}\left(\frac{1}{R}+\frac{1}{R_D}\right)e^{-\frac{R}{R_D}}$

For short range R we see strong nuclear force:

(54) $\rho'_s = \rho_s(1-\left(\frac{R_F}{R}\right)^2)e^{-\left(\frac{R}{R_D}\right)^2})$

(55) $g = \frac{G\,M}{R^2}\left(2+2\left(\frac{R_F}{R}\right)^2)e^{-(\frac{R}{R_D})^2}\right)$

energy balance result is very similar to solutionA:

(56) $\int_{R_1}^{\infty} f\ 4\pi R^2\,dR$

$=4\pi \mathrm{R_F}\,R_D^2\ (\ 1+\frac{R_1}{R_D}(\ln(\frac{R_F}{R_D})+2\gamma\text{-}1)+\mathrm{O}(\frac{R_1^2}{R_D^2}\ln(\frac{R_D}{R_1}))\ )$

$\rightarrow C^4 = 8\pi G\rho_s\,R_D^2$ because $R_1 \ll R_D$

γ =0.5772156649 Euler – Mascheroni constant

O: big O function, Order of the error term, Asymptotic upper bond

(57) $g\int_{\frac{R_1}{2}}^{R_1} f\ 4\pi R^2\,dR = 4\pi \mathrm{RF}\,R_1^2\left(\frac{1}{2}\ln\left(\frac{R_F}{2R_1}\right)+\frac{7}{8}\right)$

$= 12 \times$ (energy of any layer 1 Ramion)

Relativity and Time dilation

$$(58) \qquad t_{(R)} = \frac{t_s}{\sqrt{1- f_{(R)}}} = t_s \sqrt{\frac{\rho_s}{\rho\prime_s}} = \frac{r^2}{{r_s}^2} = t_s \frac{r}{r_s}$$

For example in long range part of gravity:

$$(59) \qquad t_{(R)} = \frac{t_s}{\sqrt{1-(\frac{R_F}{R})}} = \frac{t_s}{\sqrt{1-(\frac{2G\,M}{c^2\,R})}}$$

If a mass moves at speed **v**, we obtain the following relation:

$$(60) \qquad t_{(R)} = t_s \sqrt{1 - (\frac{v^2}{c^2} = \frac{R_F}{R})}$$

There is no distinction between these two terms $\frac{v^2}{c^2}\, or \quad \frac{R_F}{R}$ just as a body must *obtain* the speed V (escape velocity) to escape of gravity of *itself*.

However, the speed and the energy are observer-independent. When a mass "moves", the ramions effectively move in the opposite direction because mass is a hole and distributed energy in all space.

In this theory we can study time dilation more than relativity or quantum theories by above formulas.

Energy of moving objects:

We can simply form R′ function like to R′(x,y,z) or R′(R,θ,φ) or R(r, φ,z) to obtain distance of any point in space to last position of object due to ratio of its (v or ω) to c.

(in fact gravitational wave is travelling by light speed because this is maximum speed of data or energy through Ramions unless a narrow net connects two Ramions by empty geometry between other Ramions in warm hole or entanglement state)

Anyway we consider gravity speed as c

(61) $$\mathrm{E} = \rho_s \int \frac{R_F}{R'} \; e^{-\frac{R'}{R_D}} \; dV$$

for example in spherical:

(62) $$\mathrm{E} = \rho_s \int \frac{R_F}{R'} \; e^{-\frac{R'}{R_D}} \, 4\pi R^2 \, dR$$

If an object moves with speed x along a straight line, every point in space (at distance R from it) senses it $v\,\Delta t$ behind, therefore:

(63) $$\Delta x = \{(\Delta t = \frac{R}{C}) \times v\} = \frac{v}{C} \; R$$

(64) $$R' = \sqrt{\left(x + \frac{V}{C} \; R\right)^2 + y^2 + z^2}$$

(65) $$E = \frac{\rho_S \, 4\pi \; R_F R_D^2}{\sqrt{1-(\frac{V}{C})^2}} = \frac{\rho_S \, 4\pi \, \frac{2\,GM}{C^2} \, R_D^2}{\sqrt{1-(\frac{V}{C})^2}} = \frac{MC^2}{\sqrt{1-(\frac{V}{C})^2}}$$

If an rotates on a circle of radius r with angular speed ω:

(66) $$\Delta\theta = (\Delta t = \frac{R}{C}) w = \frac{w}{C} \; R$$

(67) $$R' = \sqrt{\left(x - r \; \cos\left(-\frac{\omega}{c} \; R\right)\right)^2 + \left(y - \; r \; \sin\left(-\frac{\omega}{c} \; R\right)\right)^2 + \; Z^2}$$

(68) $$\mathrm{E} = \rho_s \int \frac{R_F}{R'} \; e^{-\frac{R'}{R_D}} \; 4\pi R^2 \, dR = \; \rho_s \, R_F \, \pi \, R_D^2 \; = MC^2$$

So in Ramin theory energy of rotating object on closed routes does not exceed MC^2.

So in Ramin theory, based on the path we simply and accurately compute the energy attributed to the object.

Electromagnetism, weak Force and Fine Structure constant

Electrical charges: When a particle forms (i.e., a cavity or black hole devoid of ramion), then around that cavity, in a persistent manner, twelve ramion are situated.

These twelve Ramions are located around the cavity and must satisfy torque equilibrium. Therefore, they form pairs—two by two—that produce similar charge.

As a result, we have six pairs with positive and negative charge.

Among these six pairs, if all have the same sign, we have charge -e or +p.

Thus, each Ramion has the electric charge as follows: $\pm\frac{e}{12}$

If one pair is opposite to the others, then the net charge is:

(69) $Q=\pm\frac{8}{12}e=\pm\frac{2}{3}e$

And if two pairs are opposite to the other four pairs, the net charge will be as follows:

(70) $Q=\pm\frac{4}{12}\ e=\ \pm\frac{1}{3}\ e$

Ramionics describes simply why the possible charges of any particle can only be the 7 following numbers:0 or $\pm1\ or\ \pm\frac{2}{3}\ or\ \pm\frac{1}{3}$

Fine Construction Constant

(71) Definition: $\alpha=\frac{K\,e^2}{\hbar\,c}\ \leftrightarrow\ K=\frac{\alpha\,\hbar\,c}{e^2}$

In Ramionics we know Electrical Field is carried by Ramions with their indentation proportional to their EPE (Electrical Potential Energy) and if pure force between electron and neutron is zero So we can say DUE (down and up quarks and electrons) are similar (with same total E we

name it E_{DUE}) with equal radius so their EPE=$kq^2/2r$ is proportional to q^2

if we name EPE of electron as EPE_{DUE} we have 3 equations for DUE's

$$\textbf{(72)} \quad \begin{cases} 4.8 = E_D = E_{DUE} - EPE_{DUE} \times \left(\frac{1}{3}\right)^2 \\ 4.8 = E_U = E_{DUE} - EPE_{DUE} \times \left(\frac{2}{3}\right)^2 \\ 4.8 = E_e = E_{DUE} - EPE_{DUE} \times \left(\frac{3}{3}\right)^2 \end{cases}$$

We can fit a curve by keeping electron on the curve because its data are not models calculated. They are really measured and have more accuracy.

$$\textbf{(73)} \quad \begin{cases} E_{DUE} = 4.534 \text{ MeV} \\ EPE_{DUE} = 4.023 \text{ MeV} \\ \\ \text{refined Value (without EPE)} \\ \text{ED} = 4.087 \text{ MeV} \\ \text{EU} = 2.746 \text{ MeV} \\ \text{Ee} = 0.511 \text{ Mev} \\ \\ Ramion's\ Energy \text{ at far steady state space} \\ E_r = E_s = \frac{E_{DUE}}{36390} = \frac{4.534}{36390} = \\ 124.59467 \text{ eV} = 1.995748254\ 10^{-1} \text{ J} \end{cases}$$

Alpha measured values:

$$\textbf{(74)} \quad \frac{1}{\alpha} = 137.035999046(\pm 27) \quad \text{Cz recoil (Berkeley 2018)}$$

$$\textbf{(75)} \quad \frac{1}{\alpha} = 137.035999206(\pm 11) \quad \text{Rb recoil (LKB,Paris 2020)}$$

(76) $\frac{1}{\alpha} = 137.035999177(\pm 21)$ CODATA (2022) ; Committee on Data for Science and Technology

In Ramionics we see DUE (Down Quark-Up Quark -Electron) are baryons of generation g=8, so total energy (Mass + EPE) of any DUE is Equal to:

(77) $\frac{E_B}{E_r} = \frac{1}{10}(12\pi)^2\ 2^g$ =36383.3

$\rightarrow rounded\ up\ to\ mutiplier\ of\ 10 \rightarrow \frac{E_{DUE}}{E_r}$ =36390

{ Origin of above equation is exponential nature of collapsing ramions when transform to matter. 12 and 10 are needed to have strong layer on outer layer of particles. Layer 0 (centre) and layer 1 (L(1)=12) and layer ∞ (L(n)=10n2+2≈10n2) or the strongest layers so we can say multiplier of 10 and 12 are the strongest layers. }

(78) $\frac{1}{\alpha_\infty} = \frac{\pi}{4}\ \alpha'^2\ 2^g = \frac{\pi}{4}\ \left(\frac{10\sqrt{2}}{8\pi}\right)^{\frac{2}{3}}\ 2^8 = 137.03976507112$

{ Origin of above equation:

Equation 10: fine structure constant for ramions

$\pi\ is\ needed\ to\ compensate\ (\pi)^2\ in\ \frac{E_B}{E_r}$

2^g: $needed\ to\ compencate\ increasing\ in\ radius\ and\ decreasing\ in\ EPE\ when$ E_B grows by 2^gfactor

α'^2: needed when calculate $R^2 = (n2r\alpha')^2$

α′ calculated in FCC lattice geometry of space: 0.8255785095 }

(79) $\frac{1}{\alpha} = \frac{1}{\alpha_\infty}\sqrt{1-\frac{E_r}{E_1}}\sqrt{1-\frac{E_r}{E_2}}\ ;\alpha\ for\ particles\ E1\ \&\ E2$

(80) $\frac{1}{\alpha} = \frac{1}{\alpha_\infty}\left(\sqrt{1-\frac{1}{36390}}\right)^2 = 137.03599920783$; for any DUE

{ Origin of above equation is Equation 4 that compensates error of continues calculation for quantumised value)

So Electrical Force depends on Total Energy of particle, More Energy means larger Radius, Less EPE, Less Force.

Coulomb constant and $\varepsilon_0 = \frac{1}{4\pi K}, K = \frac{1}{4\pi\varepsilon_0}$ can be refined with above equation for other baryons. Maybe we have to double check mass and electrical charge of Heavy Particles measured before.

Electrical field distribution

Ramions support EPE easily by getting align with electrical field and a little indentation, with giving Energy of overlapped volume to space and a little decreasing in their pressure. No need to expand or stretch Space-Time. They need manipulating space time when receiving energy not at sending energy because they can't increase the pressure. This process describes how electrical field is distributed without any energy or need to photon or electrical field lines.

This Negative Equivalent Mass or energy and force (maybe in combination with the strong nuclear force) and possibility of collapsing Ramion because of too indentation is modelled by weak nuclear force.

(81) $V_{common} = n_{cap} V_{cap} = n_{cap}\, \pi(d^2 r - \frac{1}{3}\, d^3)$

r, v: $ramions\ radius$ and volume , d: indentation depth

(82) $\frac{V_c}{V} = \frac{3}{2}\left(\frac{d}{r}\right)^2 - \frac{1}{2}\left(\frac{d}{r}\right)^3$; with usual $n_{cap} = 2$

(83) $E_{rp} = E_r \frac{V_c}{V}$ $Relesed\ energy\ by\ 1\ ramion\ to\ support\ EPE$

(84) $E_{rp} = (n_{cap})\, 2\pi r \frac{\rho_r}{4} d^2$

EPE (in fact Torque) is induced layer to layer to infinity. In layer on radius of R total ramions number is proportional to R2, on the other hand induced charge is proportional to $\left(\frac{d}{r}\right)^2$ so:

(85) $$\left(\frac{d}{r}\right)^2 = \frac{R_p}{R} \rightarrow R_p \; proportinal \; to \; \frac{kQ^2}{R_Q}$$

Rq: $Charge\ matter\ surface\ radius$

Everything proceeds until electrical field hits to an electrical charge it doesn't let its ramion to rotate and align then rotational part of ramions energy produces force.

So **pressing part** of ramions energy is **dedicated** to support **EPE energy**

And **rotating part** of ramions energy is **dedicated** to generate **electrical Force**.

Force and Torque calculation:

Moment of inertia in parallel with rotation axis:

(86) $$I_{\parallel} = I_Z = \frac{\pi\, m}{60} d^3(40\, r^2 - 30\, d\, r + 6\, d^2)$$

Moment of inertia Normal to rotation axis:

(87) $$I_{\perp} = I_X = \frac{\pi\, m}{60} d^2(60\, r^3 - 80\ d\, r^2 + 45\ d^2 r - 9\, d^3)$$

Total Moment of inertia as great Edward John Routh explained:

(88) $$I = I_{\parallel}\, Cos^2\theta + I_{\perp}\, Sin^2\theta$$

Rotational Energy saved in any ramion, Force is derivative of this:

(89) $$E_{rr} = (n_{cap})\, 2\pi r \frac{\rho_r}{4} d^2\left(Sin^2\theta + \frac{2d}{3r} Cos^2\theta\right)$$

(90) $$E_{rp} = (n_{cap}) 2\pi r \frac{\rho_r}{4} d^2$$

(91) $$E_{rr} = E_{rp}\left(Sin^2\theta + \frac{2d}{3r} Cos^2\theta\right)$$

Explanation of matter–antimatter Asymmetry

Our Universe is similar to a Ramion—perhaps a ramion nested within its mother cosmos, with the possibility of an unbounded mother–daughter hierarchy, or even a recursion in which the whole curls back into its own core. In any case, the only plausible rationale for the breaking of matter–antimatter symmetry is that our Universe is currently performing the rotation.

If, in our surroundings (i.e., within the hemisphere of the Universe we inhabit), the rotation is such that a slight negative charge resides in the internal vacuum of space, then this small excess (together with electric-charge conservation) drives the heavier particles to become + and the lighter particles to become −.

Thus, in the other hemisphere of our universe, antimatter may perhaps dominate.

Therefore, if cosmological observations in our vicinity allow us to determine the prevailing direction of rotation, that direction, reflected within the ramion, can likewise indicate whether a clockwise produces of a ramion corresponds to positive or to negative charge.

Photon is not merely an electromagnetic wave; macroscopic bodies may likewise be regarded as hypothetical quanta. Accordingly, both material quanta and photon are, in essence, waves rather than particles. Under certain observational conditions, however, they may be perceived and registered as particles.

Photons and ħ in Ramionics

A single Ramion cannot act as a photon on its own, because it would have to change either its rotational speed or its direction of rotation, and it has no force to accomplish either.

Consequently, the electric field generated by the rotation of the Ramion—and, on larger scales, as described by the Maxwell's equations—by its own rotation gives rise to a magnetic field. However, since this energy transfer ultimately proceeds in the form of Ramion quanta, it can be regarded as a quantum of energy, termed photon. The energy of this photon is similar to the hypothetical Coriolis force:

(92) $F = m(c) \times w$

(93) $E = m\,(rv) \times w = mrc\,w =$

$$\hbar = mrc \quad [reduced\ Planck\ constant\ ] \rightarrow E = \hbar\, w \quad [For\ photon]$$

$$[For\ real\ Ramion]\ \hbar\, c = mrc^2 = m\, c^2\, r = er$$

Elementary particles, QFT, QCD and Strings Theory

Figure 2

In the ramion, not only the fine-structure constant but also the reason for the electric charges $0, \pm 1, \pm\frac{2}{3}\ or\ \frac{1}{3},$ the matter–antimatter asymmetry, and the specific masses of the elementary particles are readily calculable.
With the Ramion theory, the dynamics of ramion (elementary-particle) reactions can likewise be modelled with the highest conceivable precision.

In space geometry we saw $L(n)=10n^2+2$=(number of ramions of layer n) and

$T(n)=1+(10n^3+15n^2+11n)/3$=(number of ramions from centre to layer n).

Neutrinos are simple particles without electrical charge or any type of quark.

For example

NT(4)=NT309 ; T(4)=1+12+42+92+162

They are usually formed by collapsing layers 1 to n and making k neutrinos alse can be received or transmitted (radiated) in Ramionic reactions so they can have catalytic effect or start, Relax (Temporarily reduce speed to complete some stages like electrical charges stabling) and finally balance energy then stop a Ramionic reaction.

Strong layers: When Ramions (means Energy) is converting to matter particles, it means some ramions collapse and explode their energy into space consequently but Strong Layers protect space network and universe against full collapsing.

Calculating them needs huge computers but Ramionics suggests easiest way:

They are most similar layers to real Sphere so:

1-They are similar to layer 0 (solo centre) or 1(with 12 tangent Ramions) so their number is multiples of 12

2-They are similar to very large layers ($10n^2+2$) so their number is multiples of 10

Then we can conclude they are multiples of 60 but multiples of 120 are stronger anyway Layers 60 k are strong and layers 60k+30 are weak;

Under layer 120 curve is defined logarithmic volume instead of linear radius:

Strong layers: 1,3,5,7,9,11,15,18,23,30,37,47,60,75,95,120,…60k,…

for layer 1 to 120: $T(s)=T(120)/\sqrt{2}^{\text{even number}}=T(120)/2^{\text{whole number}}$

Weak Layers: 2,4,6,8,10,13,16,21,26,33,42,53,67,85,107,150,…60k+30 ,…

for layer 1 to 120: $T(w)=T(120)/\sqrt{2}^{\text{odd number}}$

Layer 119 volume divider: $T(s)=T(119)/2^n$

1,3,5,7,9,11,14,18,23,29,37,47,59,75,94,119 **very similar** to strong layers under 120

if we draw a graph with 1 for strong layers and 0 for weak layer there is related to probability of having package of particles that need collapsing n-1 layers because layer n must stop ramion collapsing.

Above table shows that when reaction stops in layer 120 it means 119 layers are collapsed and energy distributed also the reaction had stops at layers 95,75,... and **in each stage energy is doubled**. This is dynamics of ramion reactions that convert energy to mass and reverse and explains why reaction expands with **factor 2^{stage}** and any particle packet has **2^k-1 factor**.

Barions generation g (type p, k) Means collapsing of

ramions layers 1 to **120g-1**, stopped by layer **120g** to make:

p packages of Not-charged DUE (EPE equivalent included)

Any package can be (2^k -1) of DUE will be transformed to:

(2^{k-1} -1) Up + (2^{k-2} +1) Down + (2^{k-2} -1) electron

that can be transformed to **(2^{k-2} -1) (electron +proton)+ 1 neutron** after giving (EPE energy to have electrical chargs) and getting extra energy from next layers (to have rotational magnetic energy).

Neutron to proton ratio in above combination is (2^{k-2} -1) but other combination of (D U e) then (P N e) are possible:

Consider this equations:

2^{k-1}=3 (P + N) +e ; energy balance in production of DUE's

P=e **and** (2P + N)2/3 - (P + 2N)/3 - e/3=0 ; electrical charge balancing

P, N, e, k: natural number

P>N ; proton more than neutron

Then

for k<3 there is no answer

k=4 : only one answer: (3P 1N 3e) means (7U 5D 3e) means P/N:3

k=5: only one answers: (7P 1N 7e) means (15U 9D 7e) means P/N:7

k=5: only two answers:

(15P 1N 15e) means (31U 17D 15e) means P/N:15

(12P 5N 12e) means (29U 22D 12e) means P/N:12/5

Normal DUE are barions 1,5,5

Means package 15U+9D+7e that can generate 7(e+P)+1N

Energy balance:

T(119)=5688439=delta1+5*(delta5+31*(delta31+36390)

→ 5688439=4+5*(18+31(36390+309)) ;309=NT(4)

36390 seems to be accurate because generated NT(4) has more than difference to NT(3)=147 or NT(5)=561

We obtained 36390 from geometry independently of fine structure constant.

In above equation DUE's are exactly same because they have no EPE (Electrical potential Energy) and E_{due} or 36390 includes it.

Energy of uncharged packet = E_{ncp}=31EDUE

After getting electrical charges means reducing particles energy:

$E_D=E_{DUE}-EPE_e*1/9$

$E_u=E_{DUE} - EPE_e *4/9$

$Ee=E_{DUE} - EPE_e$

Energy of charged packet = E_{cp}=15E_u +9 E_d + 7 E_e

E_{cp} =(31 Edue) – (15*4/9 +9*1/9 +7) EPE_e = E_{ncp} – (8+60/9) EPE_e

E_{ncp} =31EDUE E_{cp} = E_{ncp} -132/9 EPE_e

E_{ncp} =31*4.534=140.554MeV E_{cp} =140.554-132/9*4.023=81.55 MeV

We see one neutrino NT(4) is generated with any EUD in the major Ramionic reaction. some of generated neutrino continues this reaction to more layers to convert DUE to NPE (Neutron proton electron) the others starts new reactions and remained neutrinos may be be radiated and even participate in Cosmic microwave Neutrino **CvB** or Cosmic microwave background **CMB.**

Layer 120 can not resist against explained reaxtion in the reaction continues to transform (Due's) Finally 7 electrons, 7 protons, 1 neutrons remains:

Final energy = E_F = 7*0.51099895069 +7*E_P +1*E_N

E_P=938.27208816 MeV

E_N=939.56542052 MeV

E_{Packet} =7(Ep+Ee)+En= 7511.0470302948 Mev

E_{5p}= (5)*7511.0470302948 Mev ;;;no packet added after layer 120

E_{5p} = 37555.235151474 Mev

E_s =124.59467 eV

IT(E_{5p} / E_s)=448

Final Stopping Layer=next stopping layer=480

Neutrino Energy to Barion Energy ratio=21.919794%

E_{6p} = (5+1)*7511.0470302948 Mev ;;;**one packet added after layer 120**

E_{6p} = 45066.2821817688 Mev

IT(E_{6p} / E_s)=448

Final Stopping Layer=next strong layer=480 so last collapsed layer is 479.

Neutrino Energy to Baryon Energy ratio=1.599828%

So Extra Packet is more compatible with current observations.
in fact at Ramionic reactions **most similar, large, stable packets** and particles are produced. In the first case reaction has about 22% extra energy whit 5 packets so sixth packet have to generated before.

We can conclude that neutrino type B have a little life time and in Type A stable neutrino have k=1.

Stong layers are 1,3,5,7,9,11,15,18,23,30,37,47,60,75,95,120,…60k,… so stable neutrinos are NT(2), NT(4), NT(6), NT(8),NT(10),…

So we can balance final energy:

we suppose D U e are unchanged and new particle called P and N are absorbing similar rotational energy saving magnetic energy named M for any proton or neutron

T(479)=367489759 Ramions

T(479)/6=61248293+1

Any packet energy: 61248293 Es

8M= 61248293 Es – Ecp -31*N(4)

Es =124.59467 eV ;Ramions energy

Ecp= 81.55 MeV ;after having electrical charge E reduced

N(4)=309 Es ;Radiated before ending reaction

M=943.55 MeV

So

E_P=943.55+2(E_U=2.746)+(E_D=4.087)=953.129 MeV

E_N=943.55+1(E_U=2.746)+2(E_D=4.087)= 954.47 MeV

Higgs Boson:

IT(126 GeV/ Es)=671

Accurate Energy of Z Boson=T(660-1)*Es=119.130 GeV

Higgs boson is NT(659) ;no need to explain the mass in ramionics

ZBoson:

IT(91.2 GeV/ Es)=603

Accurate Energy of Z Boson=T(600-1)*Es= 89.484166 GeV

Z boson is NT(599)

W Boson:

IT(80.4 GeV/ Es)=578 not acceptable

IT(2*80.4 GeV/ Es)=728 ;we know they are couple

Accurate Energy of W Boson=T(720-1)*Es/2=77.346542 GeV

W bosons are generated in special reaction with two + - production.

;no need to explain the weak nuclear force in ramionics

Ramionics need no Energy or Force carrier or mass Producting particle or Dark matter or Dark energy. all of them simply are explained by Ramions. Other particle may be are wrong interpret or huge neutrino or complex particles. Bcause in Ramionics we now 12 ramions around any particle hole have electrical charge even on Neutral particles so any particle can have 12 bond with other particles. In proton and neutron central particle uses only 2 bonds.

Ramionics is compatible with QFD except that in Ramionics there is only one fluctuating field: Ramions,

Ramionics help QCD o do more effective calculation without gluon

Ramionic models space-Time particles but real and 3 Dimensional.

Cosmology and multiverse

In Ramin theory, bridges have been built not only between gravitation and electromagnetism (the so-called four fundamental forces) and between relativity and the quantum, without singularities for everything from the smallest particles to the largest black holes.

For example, the followings, relate dark matter and the energy density of space (e.g., dark energy):

(94) (far Gravity For k=1, p=1) $F = \frac{2\,GM}{C^2 R}\left(\frac{1}{R} + \frac{1}{R_D}\right) e^{-\frac{R}{R_D}}$

(95) $R_D^2 = \frac{C^4}{8\pi\ G\ \rho_s}$

This theory models matter, dark matter, and waves by altering the arrangement of Ramions, and therefore only the energy of space must be taken into account in calculations of the age and dimensions of the Universe.

Studies based on this theory open many avenues concerning the expansion of the Universe, the Big Bang, and cosmology, in addition to relativity, quantum theory, and elementary particles.

In Ramion Theory all of universe is filled by Ramion, Ramion and space energy density is same even close to matter, so **maybe** in calculation on Hubble constant H0 we have to consider Dark energy (= Space energy density) share as 100% means 14.46×10^9 year Universe age and 14.46×10^9 LY observable radius.

Ramin theory and philosophy

On the one hand, ramions remove the finger of God from the fine-structure constant and fine tuning, and place the burden upon geometry!

On the other hand, they indicate that our entire Universe could be a ramion within a more transcendent universe; conversely, our Universe may be the mother or daughter of other universes. Perhaps this chain is infinite, or perhaps it returns to itself—our Universe may be, for example, the mother of its own mother's mother.